PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

A NEW SNAKE FROM FLORIDA!

BY M. K. BRADY.

During June, 1931, the National Zoological Park received from Mr. R. F. Deckert a living snake taken from Lower Matecumbe Key, Monroe Co., Fla. The specimen represented an apparently distinct race of *Elaphe quadrivittata* and, especially since it seems to have been confused heretofore with Cope's *Elaphe rosacea*, I feel warranted in describing it as new. I name it in honor of Mr. Deckert who has contributed so much to our knowledge of Florida herpetology.

Elaphe quadrivittata deckerti, new subspecies.

Diagnosis.—A slender, orange-red Elaphe, having four brownish longitudinal stripes on the body, about 40 plumbeous saddles on the dorsum between the median stripes, a bright orange, distinctly spotted venter, chin and throat bright yellow, ventral scales usually more than 240, caudals normally 90 or more.

Range.—Lower Matecumbe Key, Monroe Co., Florida.

Type.—U. S. N. M. No. 84295, a young male collected on Lower Matecumbe Key, June, 1931, by R. F. Deckert. Paratypes M. C. Z. Nos. 29134 and 29322, taken on Lower Matecumbe Key during 1928, by J. N. Farnum.

Description of type.—Rostral twice as broad as deep, barely visible from above; length of internasal suture one-half length of prefrontal; frontal narrowing posteriorly, slightly longer than its distance from rostral and well separated from preoculars; supraoculars narrower than frontal; nasal divided; loreal small; one preocular; two postoculars, the lower one very small; temporals 1+3; supralabials 8 on right side, 9 on left, the second in contact with the nasal and loreal, third in contact with loreal and preocular, the fourth on the left side barely touches the preocular, the right fourth and left fifth touch the preocular and eye, the right fifth and left sixth touch the eye, the postocular and the first temporal; 12 infralabials, the first coming together behind the symphysial; the chin shields are of

equal length, the first contacting five, the second two, lower labials. Eleven dorsal rows of scales on the anterior part of the body are slightly keeled, the number of rows increasing to twelve posteriorly. There are two pores at the apex of each scale. Scales in 25 rows anteriorly, increasing to 27 and decreasing to 17 at beginning of tail; ventrals 243; anal divided; caudals 80, the tail being slightly mutilated.

Dimensions.—Head and body 797 mm.; tail 171 mm.; diameter of eye 4.5 mm.; eye to tip of snout 8 mm.; total length 968 mm.

Coloration (in life).—Above four hair brown longitudinal stripes, extending from neck along body, dorsal stripes extending to tip of tail, lateral stripes ending at vent. The stripes cover two scale rows anteriorly and posteriorly, widening to cover three rows mediad. Forty dark grey to plumbeous, somewhat concave saddles between dorsal stripes on body. Saddles on tail represented by an indistinct plumbeous clouding. Dorsal ground-color a rich orange-ochraceous, slightly clouded with grey. Scales in longitudinal stripes frequently tipped with white. Ventral color a bright wax yellow mottled with white on the chin and throat changing to orange, spotted with grey, posteriorly. The ventrals are upturned at their ends and are a rosy grey over the posterior two-thirds of the animal, forming a less distinct third pair of longitudinal stripes. The iris is strongly suffused with red, the pupil is black. The more anterior dorsal saddles have faint suggestions of black borders. The top of the head is more of a buff than the dorsal ground color of the body and has no pattern.

M. C. Z. Nos. 29134 and 29322, respectively a male, 813 mm., and female, 912 mm., which I have designated as paratypes, agree precisely with the type but show a partial loss of the longitudinal stripes due to sloughing of the scales incidental to preservation. In addition to the type and paratypes, I have seen four other specimens, all typical. form is at present readily distinguishable from the typical E. q. quadrivittata from northern and central Florida and from the confusing forms of the species found in tropical Florida, on the Eastern Rock-Rim and on the semi-insular Keys of the Everglades. It is conceivable that the connection between Lower Matecumbe and the northern Keys and mainland through the causeways of the Overseas Highway eventually may bring about a change in this situation. Snakes of this species seem to have less of a disposition to wander than do some other related serpents and this may be instrumental in delaying changes due to crossing with other stocks, in the case of the present form. This tendency to remain in one locality, apparently due to the semi-insularity of the hammocks in which the species lives, may have combined with another possible factor, the ecological changes experienced by a Sabalian forest animal living under true tropical conditions, to produce the complexity of forms found on what may be called the mainland of tropical Florida. Several of these types stand out and, with a study of sufficient material, eventually may be found to warrant consideration as distinct races. One of the most distinct of these forms, which I mention because it has puzzled students of reptiles in this singular area, is apparently restricted to the southeastern hammocks or Kevs of the Eastern Rock-Rim, in the Black Point Creek area. This is a

brilliant orange form with a most marked tendency towards loss of all markings in the adult.

Concerning Elaphe rosacea (Cope), which has been confused with the present form, E. q. deckerti, I have seen but two specimens; the type, U. S. N. M. No. 14418, from Key West, and M. C. Z. No. 14456, from Big Pine Key. The species resembles E. quadrivittata in possessing a ventral scute count of 240; it resembles E. guttata in the short tail, 74 caudals in the perfect specimen, and apparently does not have, as Cope suggested it did, the longer tail of the former species. It further resembles guttata in the square shape of the rostral, in the spotting of the venter, color pattern of the head and, from the accounts of the fresh specimens, coloration of the saddles. The possession of the four longitudinal stripes may not be an entirely reliable character, for two reasons: First, many of these southern Elaphes tend to lose the stripes upon preservation, in spirits at least, the stripes sloughing off with the softened outer epidermis. Secondly, some guttata are marked by four well developed longitudinal stripes, at least in some parts of Florida. I have seen an otherwise perfectly typical guttata from Gainesville, Fla., having the perfectly distinct stripes of quadrivittata. Mr. O. C. Van Hyning, of the Florida State Museum, through whose courtesy this specimen was made available, informs me that he has seen similar examples from various parts of Florida. The most distinguishing character of rosacea is the lateral pattern, a series of w shaped markings below and between the dorsal saddles and formed by the extensions of the corners of the saddles.

E. guttata occurs, apparently, throughout the southern Florida area. I have seen typical examples from the Lower (Key West) and Upper (Lower Matecumbe) Keys, from Paradise Key and other points on the Eastern Rock-Rim and from Cape Sable.

I am indebted to Dr. Leonhard Stejneger and Miss Doris Cochran of the National Museum, Dr. Thomas Barbour and Mr. Arthur Loveridge of the Museum of Comparative Zoology, for their kindness in allowing me to examine the specimens in their collections.